

## The Wheels are Turning

### *Cooperative Project Yields Elusive Copper River Chinook Data*

The Copper River drainage is a source of prized Chinook salmon for subsistence, commercial and sport fishermen. It is a large, fast flowing, glacially fed river system that can make fishing, at best difficult and at times dangerous. The Copper River drainage is also a challenge to fisheries managers because the abundance estimates they rely on to manage these fisheries have been difficult to collect in the fast, turbid river system. An innovative study, funded through the Fisheries Resource Monitoring Program, and conducted cooperatively by the Native Village of Eyak and LGL Research Associates, Inc. has begun providing this valuable and elusive information to fisheries managers.

The project uses two sets of fishwheels, approximately forty miles apart, to capture Chinook salmon. At the first set of fishwheels, located in Baird Canyon, Chinook salmon are tagged and returned to the river. At the second set of fishwheels, just below Wood Canyon, the fish are recaptured. The ratio of tagged fish that are recaptured gives fisheries managers an estimate of the abundance of Chinook in the drainage.

To make this project successful, several challenges had to be overcome: enough Chinook salmon had to be captured to generate accurate abundance estimates; the equipment had to function well under variable water conditions; and large numbers of sockeye salmon that are also migrat-



Staff at one of the Baird Canyon fishwheels tag a Chinook salmon.

ing through the river would have to be managed. Ultimately, the investigators were able to address these issues with a modified fishwheel design and development of an escape panel for the sockeye salmon.

In addition to providing valuable data to fisheries managers, this project has increased the confidence of the users in the management of the Chinook fisheries and has made the Native Village of Eyak an active participant in the management process. ●



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One of the specially designed fishwheels at Wood Canyon turns as staff transfer a Chinook salmon to read its tag.

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